

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,213,479 B2  
APPLICATION NO. : 10/785130  
DATED : May 8, 2007  
INVENTOR(S) : Mitsui

Page 1 of 3

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 2:

- Line 20, change "ups-and-downs" to -- up-and-down --.
- Line 25, change "ups-and-downs" to -- up-and-down --.
- Line 35, change "A vibration proof" to --A vibration-proof--.
- Line 55, change "constant K<sub>1</sub> and K<sub>2</sub> are" to --constants K<sub>1</sub> and K<sub>2</sub> are--.
- Line 56, change "a negligibly small values" to --negligibly small values--.

Column 4:

- Line 2, change "the second the vibratory" to --the second vibratory--.

Column 5:

- Lines 23-24, change "vibration proof rubber" to --vibration-proof rubber--.
- Lines 24-25, change "such as an hydraulic" to --such as a hydraulic--.
- Line 30, change "Each of bearings" to --Each of the bearings--.
- Line 37, change "such as an hydraulic" to --such as a hydraulic--.

Column 6:

- Line 39, change "one of shoulders" to --one of the shoulders--.
- Line 40, change "20 eccentric weight" to --eccentric weight--.
- Line 41, change "anti-clockwise" to --anticlockwise--.
- Line 51, change "one of fixed" to --one of the fixed--.

Column 7:

- Line 10, change "at opposing-ends across" to --at opposing ends across--.
- Line 13, change "one of shoulders" to --one of the shoulders--.
- Line 67, change "anti-clockwise" to --anticlockwise--.

Column 8:

- Line 3, change "one of shoulders" to --one of the shoulders--.
- Line 5, change "the center of the gravity" to --the center of gravity--.
- Line 10, change "anti-clockwise" to --anticlockwise--.
- Line 13, change "the other of shoulders" to --the other of the shoulders--.
- Line 21, change "anti-clockwise" to --anticlockwise--.
- Line 54, change "rotate in anticlockwise" to --rotate anticlockwise--.
- Line 61, change "rotate in anticlockwise" to --rotate anticlockwise--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,213,479 B2  
APPLICATION NO. : 10/785130  
DATED : May 8, 2007  
INVENTOR(S) : Mitsui

Page 2 of 3

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 9:

Line 42, after “( $m_3r_3+m_4r_4$ )” insert a period.  
Line 44, change “lower-side” to --lower side--.  
Line 48, change “**FIG.3A through FIG. 3D illustrates**” to --**FIG.3A through FIG. 3D illustrate**--.  
Line 59, change “difference of them” to --difference between them--.

Column 10:

Line 9, change “rotate in clockwise” to --rotate clockwise--.  
Line 12, change “lower-side” to --lower side--.  
Line 28, change “rotate in anticlockwise” to --rotate anticlockwise--.  
Line 31, change “lower-side” to --lower side--.  
Line 64, change “because of following-reasons.” to --because of the following reasons. --.

Column 11:

Line 15, change “the drum weights” to --the drum weight--.  
Line 18, change “ups-and-downs directions” to -- up-and-down directions--.  
Line 25, delete “.:mr(stan-”.  
Line 26, change “dard” to --.:mr(standard--.  
Line 57, change “(horizontal vibration)/” to --(horizontal vibration))/155--.  
Line 58, delete “155”; change “vibration)=0.31” to --vibration)= 0.31--.

Column 12:

Line 67, change “anti-clockwise” to --anticlockwise--.

Column 13:

Line 23, change “inside-circumference” to --inside circumference--.  
Line 38, change “eccentric moment  $m_3r_3$ ” to --eccentric moment  $m_3r_3$ --.  
Line 58, change “numbers of the vibratory shaft” to --numbers of vibratory shafts--.

Column 14:

Line 5, change “Although there have” to --Although there has--.

Column 15:

Line 13, change “fixed to first the” to --fixed to the first--.  
Line 17, change “fixed to second the” to --fixed to the second--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,213,479 B2  
APPLICATION NO. : 10/785130  
DATED : May 8, 2007  
INVENTOR(S) : Mitsui

Page 3 of 3

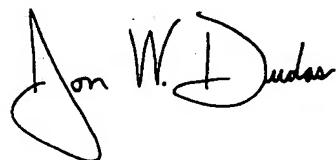
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 16:

Line 14, change "are asymmetrically located" to --are axisymmetrically located--.

Signed and Sealed this

Fourteenth Day of August, 2007



JON W. DUDAS  
*Director of the United States Patent and Trademark Office*